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(54) ELECTRONIC MEDICAL RECORD DATASIFTER

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(58) Field of Classification Search

None

See application file for complete search history.

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(57) ABSTRACT

A method is presented for generating a data set from a database. The method involves iterative data manipulation that stochastically identifies candidate entries from the cases (subjects, participants) and variables (data elements) and subsequently selects, nullifies, and imputes the information. This process heavily relies on statistical multivariate imputation to preserve the joint distributions of the complex structured data archive. At each step, the algorithm generates a complete dataset that in aggregate closely resembles the intrinsic characteristics of the original data set, however, on an individual level the rows of data are substantially altered. This procedure drastically reduces the risk for subject reidentification by stratification, as meta-data for all subjects is repeatedly and lossily encoded.

19 Claims, 3 Drawing Sheets

